In re TURNER ET AL., Application No. 09/705,395
Amendment A

## REMARKS

The Office action dated September 27, 2004, and the references cited have been fully considered. In response, please enter the amendments presented herein and consider the following remarks. Reconsideration and/or further prosecution of the application is respectfully requested. No new matter is added herein.

In terms of the claim amendments, independent claim 1 is amended to basically add the limitations of original claim 5, to remove the maintaining limitation and "from the device", and to include the re-insertion operation of original claims 2-4 and claims 6-8 based on the determination of a next target time (e.g., part of original claim 10), with claims 2-4 and 6-8 being canceled, and dependent claim 10 amended accordingly; also original claim 1's dependent claim 11 (a dependent computer-readable medium claim) is canceled as new independent claim 30 is added herein corresponding to amended claim 1, with support provided at least for that provided by and for original claims 1-11. Also, new dependent claims 25-27 are added herein to depend from claim 1. Claims 16-24 are canceled to free up claim fees for new claims. New dependent claims 28 and 29 are added and depend from claims 12 and 14 respectively. Finally, new claim set 30-35 is in the form of computer-readable media claims corresponding to method claims 1, 9, 10, 25, 26 and 27, respectively; and new claim set 36-41 is in the form of means-plus-function claims corresponding to method claims 1, 9, 10, 25, 26 and 27, respectively Support for these new claims is provided in the original application at least in FIGs. 2A, 2B and pages 8 and 12-13 of the original application.

Applicants appreciate the Office citing Byrn et al., US Patent 5,533,020, and for providing Applicants the opportunity to distinguish it from the pending claims. Note, if the Office action complies with MPEP § 706 and specifically 37 CFR 1.104(c)(2), then Byrn et al. (the cited prior art) is the best references available. As Byrn et al. fails to teach all the claim elements and limitations as required by the MPEP for a proper rejection, then all pending claims are believed to be allowable over the best prior art available, and Applicants request the claims be allowed and the application pass to issuance.

Claims 1, 3, and 9-24 are rejected under 35 USC § 102(b) as being anticipated by Byrn et al., US Patent 5,533,020, and claims 2 and 4-8 under 35 USC § 103(a) as being unpatentable over citing Byrn et al., US Patent 5,533,020.

For anticipation under 35 USC § 102, the reference must teach each and every aspect of the claimed invention either explicitly or impliedly. MPEP § 706.02. Inherent means it *must* occur. The fact that a certain result or characteristic *may* occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. MPEP § 2112 (*emphasis in original*). Moreover, the burden is on the Office to present a *prima facie* case of anticipation. Similarly, the burden is on the Office Action to establish a *prima facie* case of obviousness, which has not been done as the MPEP requires, *inter alia*, that: "the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." MPEP § 706.02(j) (*citing In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991))(emphasis added).

After the amendments are entered, there are five pending independent claims: 1, 12, 14, 30 and 33, each of these including a limitations of timing wheels and transit list(s), with items removed from the timing wheels and placed in the transit lists, which allows a decoupling of the removal of entries from the timing wheels and the sending of information and rescheduling of the information stream, which is an advantage that some claimed embodiments have over Byrn et al. For example, FIG. 2B of the present application illustrates how one embodiment so operates. Also, FIGs. 6A-B illustrate this decoupled operation in one embodiment, including the operation of removing an entry from the timing wheels (FIG. 6A) and the operation of removing an entry from the transit list (FIG. 6B). Similarly, FIG. 7A illustrates this decoupled operation with multiple transmit lists used in one embodiment, as does FIG. 7B of one embodiment.

In rejection the claim limitation of transit list(s), the Office action states that this is disclosed by Byrn et al.'s VC table in VCA where QIDs get passed for cell transmission. Applicants respectfully traverse this interpretation of Byrn et al., as it operates different than

stated, and Applicants submit that Byrn et al. neither teaches nor suggests a transit list. However, Byrn et al., col. 5, line 47-48 states that "[t]he QID is also passed to the VCA (path e) in order for the next cell for that VCI to be scheduled as discussed earlier" with this passage referring to FIG. 1. Therefore, the VCA has nothing to do with transmission, rather it is used for maintaining scheduling information.

Moreover, claim 1 includes the limitations of "removing the entry from said one of the plurality of timing wheels at an appropriate time corresponding to a position of the entry in the plurality of timing wheels; placing the entry into a transmit list in response to removing the entry from said one of the plurality of timing wheels; removing the entry from the transmit list; and in response to the entry being removed from the transmit list: sending information corresponding to the entry, determining a next target time, and re inserting the entry removed from the transmit list into the plurality of timing wheels based on the next target time." Byrn et al. neither teaches nor suggests such a limitation, rather it teaches that (1) the QID is only "removed" from the current wheel position after a cell transmission (col. 5, line 56-57) although it previously sends a copy to the MMU and VCA, but this neither teaches nor suggests the corresponding claim limitations. Moreover, Byrn et al. teaches away from the use of transmit lists as recited by the claims as the architecture of Byrn et al. does not lend itself to performing such limitations, and operation of Byrn et al. would materially change, and there is no teaching nor suggestion for such material operations changes.

Claim 1's dependent claims of 9, 10, 25, 26, and 27 are believed to be allowable for at least the reasons presented for allowance of claim 1. Moreover, claim 25 requires that the transmit queue includes another entry, wherein in contrast Byrn et al. does not have multiple items removed from a wheel in a transmit queue (see col. 5, lines 42-59). Moreover, claim 26 requires that the timing wheels are of a same priority level. Claim 27 requires the selection of the finest gratuity timing wheel for insertion irregardless of a rate corresponding to the entry (one such embodiment is described on page 8 of the original application at it is placing an item in a wheel with the finest granularity based on the next target time and irregardless of a rate of an

entry); where, in contrast, Byrn et al. teaches that the wheels are related to rates (e.g., "If the common communications link bandwidth is B cells per second, and each ring contains 100 slots or entries, then timing wheel at rate 1 will support virtual connection (VC) rates from B to B/100 cells per second, and timing wheel at rate 2 will support VC rates from B/10 to B/1000 cells per second, and timing wheel at rate 3 will support VC rates from B/100 to B/10000 cells per second, and so on.") col. 4, lines 45-52.

For at least these reasons, claims 1, 9, 10, 25, 26, and 27 are believed allowable. Moreover, each of claim sets 30-35 and 36-41 are believed allowable for at least the same reasons for allowance of there corresponding claims 1, 9, 10, 25, 26 and 27, respectively

Independent claims 12 and 14 recited similar transmit lists limitations and are believed to be allowable for at least the same reasons already presented herein, and therefore will not be repeated.

**Final Remarks.** In view of the above remarks and for at least the reasons presented herein, all pending claims are believed to be allowable over the prior art of record, the application is considered in good and proper form for allowance, and the Office is respectfully requested to issue a timely Notice of allowance in this case. If, in the opinion of the Office, a telephone conference would expedite the prosecution of the subject application, the Office is invited to call the undersigned attorney.

Applicants believe no extension of time is required, but hereby petitions any such extension of time required and authorizes the Commissioner to charge any associated fees to Deposit Account No. 501430.

Additionally, the Commissioner is hereby generally authorized under 37 C.F.R. § 1.136(a)(3) to treat this communication or any future communication in this or any related application filed pursuant to 37 C.F.R. § 1.53 requiring an extension of time as incorporating a request therefore, and the Commissioner is hereby specifically authorized to charge Deposit

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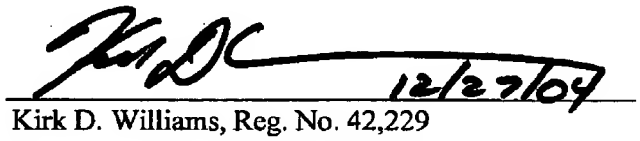
Account No. 501430 for any fee that may be due in connection with such a request for an extension of time. Moreover, the Commissioner is hereby authorized to charge payment of any fee due any under 37 C.F.R. §§ 1.16 and § 1.17 associated with this communication or any future communication in this or any related application filed pursuant to 37 C.F.R. § 1.53 or credit any overpayment to Deposit Account No. 501430.

Respectfully submitted,
**The Law Office of Kirk D. Williams**

Date: December 27, 2004

By  12/27/04

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